



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/343,165	06/29/1999	GORAN HALL	34646-00436U	7562
38065	7590	04/27/2005	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024			FERRIS, DERRICK W	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/343,165

Applicant(s)

HALL ET AL.

Examiner

Derrick W. Ferris

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-27 and 29-32 is/are rejected.
- 7) ☒ Claim(s) 28 and 33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/16/2005 has been entered.

### *Response to Arguments*

2. This Office action is in response to applicant's paper filed 3/16/2005. **Claims 25-33** as amended are still in consideration for this application. Applicant has canceled claims 1-24. Applicant has added claims 25-33.

3. Examiner does **not withdraw** the obviousness rejection to the new set of claims to *Cisco* in view of *Klements*. Applicant argues that the new claims clarify that router, address memory, and address translator are implemented in a mobile station. Examiner still maintains the rejection as stated below since it would have been obvious to implement the wireline system as taught by *Cisco* to a wireless system for the purpose of mobility. In addition, the address translation scheme would not change as taught by *Cisco* since only layer 1 changes from a wireline medium to a wireless medium (i.e., layer 3 network address translation stays the same). As such, the examiner has rewritten the rejection to maybe clarify the above issue between the examiner and applicant. In addition, since applicant paid for a continued examination, the examiner has also applied a new, very similar rejection, with different art from a new search such that the applicant may further see the examiner's argument possibly from a different angle.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 25-27 and 29-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over “Configuring Network Address Translation” by *Cisco* in view of “MINT – A Mobile Internet Router” by *Klemets et al.* (“*Klemets*”).

As to **claim 25**, the address translation method proposed by applicant is well known in the art with respect to a wire-line system. As such, please see e.g., figure 131 on page DC-698 of the *Cisco* reference which teaches the address translation method.

Not clearly shown in the figure is a wireless network and thus a mobile phone acting as a router as argued by applicant. However, the router shown in figure 131 connects more than one host to form a local area network as well as communicates with an external network. Examiner notes that the router taught by *Cisco* performs both address translation as well as contains memory for storing the address in the form of the NAT address table.

*Klemets* teaches that wireless routers are well known in the art. By way of example, *Klemets* discloses a wireless router called a Mobile INternet Router (MINT) as part of a wireless communication scenario shown in figure 3 on page 72. Figure 3 shows that the functionality for a wireless communication device (shows as a box with a “?”)

could be the same at either the base station connected to the Internet or on a mobile LAN connected with a host computer [page 71 right hand column].

Thus the examiner proposes to modify *Cisco* by clarifying that the router shown e.g., in figure 131 can be implemented in a wireless network such that the router is a mobile device.

Hence examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to modify the wire-line system to include a wireless system such that the router becomes a mobile device. In particular, one skilled in the art would have been motivated to modify the system for mobility. As such, *Klemets* teaches the above motivation by teaching a wireless router as part of a MINT router. Finally, examiner notes a strong reasonable expectation of success since the address translation method does *not* have to be modified to accommodate a wireless system (i.e., a wireless router or mobile device acting as a wireless router can simply replace a wire-line router in the figure).

As to **claim 26**, see the address translation method as taught by *Cisco* and which is also well known in the art.

As to **claim 27**, see all the addresses stored in the address translation table. The addresses are used for the duration of the connection.

As to **claim 29**, see the references in combination where the hosts devices are taught in figure 131 of *Cisco*.

As to **claim 30**, see similar rejection to claim 25.

Art Unit: 2663

As to **claim 31**, see similar rejection to claim 25. Note that a router is clearly taught by the *Cisco* reference.

As to **claim 32**, see similar rejection to claim 30.

6. **Claims 25-27 and 29-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over “Configuring Network Address Translation” by *Cisco* in view of U.S. Patent No. 5,787,111 A to *Gilmore et al.* (“*Gilmore*”).

As to **claim 25**, the address translation method proposed by applicant is well known in the art with respect to a wire-line system. As such, please see e.g., figure 131 on page DC-698 of the *Cisco* reference which teaches the address translation method.

Not clearly shown in the figure is a wireless network and thus a mobile phone acting as a router as argued by applicant. However, the router shown in figure 131 connects more than one host to form a local area network as well as communicates with an external network. Examiner notes that the router taught by *Cisco* performs both address translation as well as contains memory for storing the address in the form of the NAT address table.

*Gilmore* teaches that wireless routers are well known in the art as shown e.g., in figure 8 (i.e., see the router 604 which acts as a mobile device since it contains wireless connections 810 and 610b-d).

Thus the examiner proposes to modify *Cisco* by clarifying that the router shown e.g., in figure 131 can be implemented in a wireless network such that the router is a mobile device.

Hence examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to modify the wire-line system to include a wireless system such that the router becomes a mobile device. In particular, one skilled in the art would have been motivated to modify the system for mobility. As such, *Gilmore* teaches the above motivation by teaching a wireless router as part of a MINT router. Finally, examiner notes a strong reasonable expectation of success since the address translation method does *not* have to be modified to accommodate a wireless system (i.e., a wireless router or mobile device acting as a wireless router can simply replace a wire-line router in the figure).

As to **claim 26**, see the address translation method as taught by *Cisco* and which is also well known in the art.

As to **claim 27**, see all the addresses stored in the address translation table. The addresses are used for the duration of the connection.

As to **claim 29**, see the references in combination where the hosts devices are taught in figure 131 of *Cisco*.

As to **claim 30**, see similar rejection to claim 25.

As to **claim 31**, see similar rejection to claim 25. Note that a router is clearly taught by the *Cisco* reference.

As to **claim 32**, see similar rejection to claim 30.

***Allowable Subject Matter***

7. **Claims 28 and 33** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. **Claims 28 and 33** are allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art references which teaches when a host on the LAN has been assigned a globally defined network layer address has not received no transmitted any packet data via the address translator for a predetermined time, the assignment of the globally defined address is withdrawn and this address may be reused by any host on the LAN since the above limitation may depend on properties of the wireless connection which is not taught by the *Cisco* reference in particular nor the references used in combination.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.



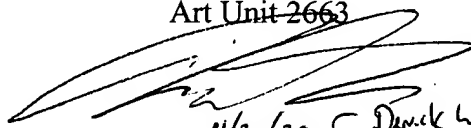
Art Unit: 2663

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DWF

Derrick W. Ferris  
Examiner  
Art Unit 2663

  
4/24/2005 Derrick W. Ferris